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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,939	03/11/2004	Charles B. Worrick III	00216-664001 / Case 8134	8003
26161	7590	02/21/2006	EXAMINER	
FISH & RICHARDSON PC			MICHALSKI, SEAN M	
P.O. BOX 1022			ART UNIT	
MINNEAPOLIS, MN 55440-1022			PAPER NUMBER	

3725

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,939

Applicant(s)

WORRICK ET AL.

Examiner

Sean M. Michalski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/21/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because Figure 44 is unclear as to the component which defines the angle ' θ_2 '. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. Appropriate correction is required.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: ' θ_2 ' in figure 44. On page 20, line 29 a reference is made to ϕ_2 . Corrected

drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The attempt to incorporate subject matter into this application by reference is ineffective because on page 11, line 12, the application number is omitted.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 11 and 23 recite the limitation "having a durometer of between about 28 and 60 Shore A". The Specification discloses that "Materials for forming the canopy can be selected as desired. Suitable materials include, for example, elastomers such as

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thermoplastic elastomers, silicone and latex". There is insufficient antecedent basis for the limitation to "a durometer of between about 28 and 60 Shore A" in the claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

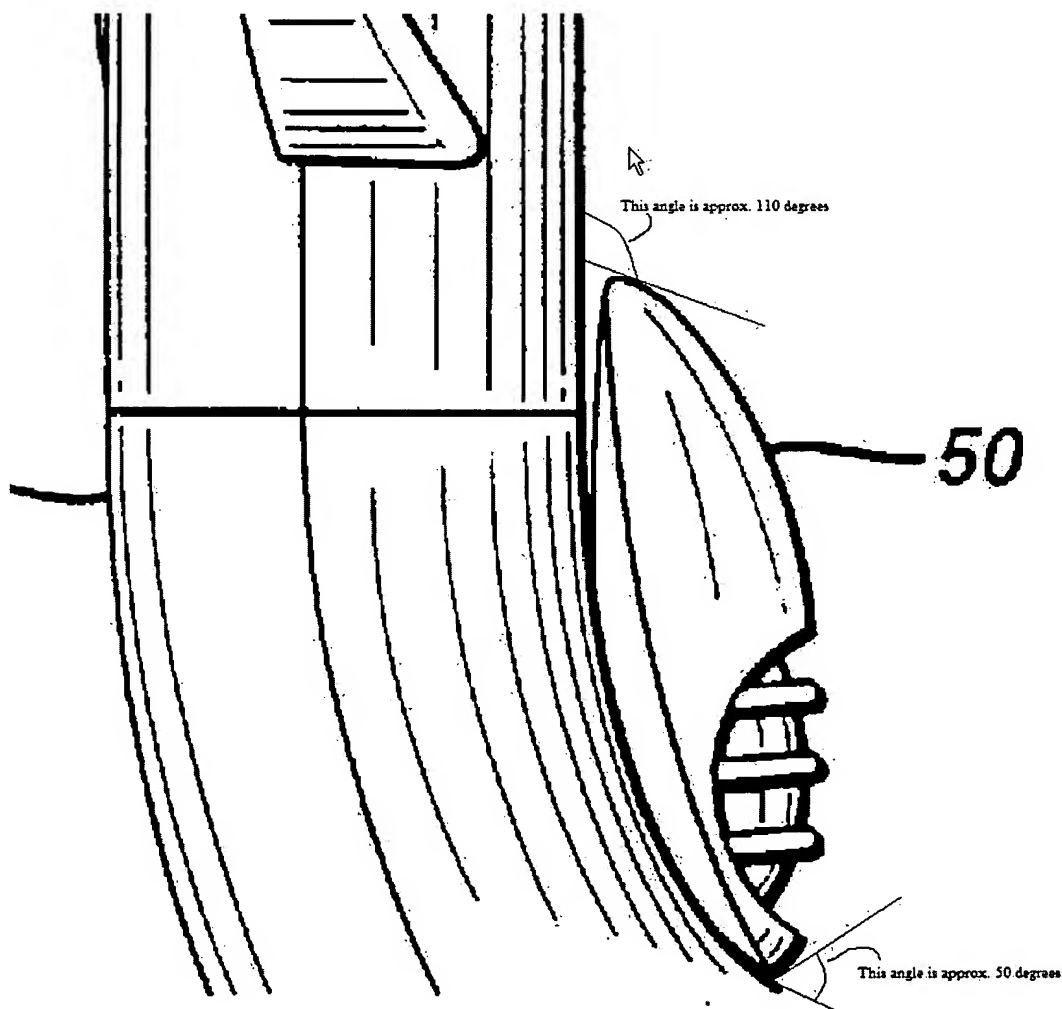
7. Claims 1, 4-8, 10-13, 16-19, and 21-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Apprille Jr. et al (USPN 5,855,071). Regarding claim 1, Apprille'071 discloses A handle (#30, figure 3) with a handle casing (#42, figure 3), an interconnect assembly disposed at an end of the handle casing (#26, figure 3), a release button comprising a button substrate (#54, figure 3) and a flexible canopy extending outwardly from the button substrate toward the handle casing (#50, figure 3).

Regarding claim 4, Apprille'071 discloses that the edge of the canopy contacts the handle casing (#50 is in contact with #12, figures 16 & 17).

Regarding claim 5 Apprille'071 discloses that the edge of the canopy contacts the handle casing when the button is in an unloaded position (#50 is in contact with #12, figures 16 & 17).

Regarding claim 6 Apprille'071 discloses that the edge of the canopy contacts the handle casing when the button is in an actuated position (#50 is in contact with #12, figures 16 & 17).

Regarding claim 7 Apprille'071 discloses that the edge of the canopy contacts the handle casing having an angle of no greater than 110 degrees. This is because the angle formed between the button and the handle casing varies and is at a maximum in the front center region of the canopy, which at no time is greater than 110 degrees (#50 is in contact with #12, figures 16 & 17). See the figure below.



Regarding claims 8, 10, 19 and 21 Apprille'071 discloses that the edge of the canopy of the shaving razor disclosed above contacts the handle casing having an angle which varies around the periphery and has a maximum at "a center region" of the canopy. This is seen in the figure above, from Figure 18 of Apprille'071.

8. Regarding claim 13, Apprille'071 discloses A shaving razor with a cartridge (#14 figure 1) with a blade unit including a housing (#16 figure 1) that carries one or more shaving blades (#18 figure 1) with a handle (#30, figure 3) with a handle casing (#42, figure 3), an interconnect assembly disposed at an end of the handle casing (#26, figure 3), a release button comprising a button substrate (#54, figure 3) and a flexible canopy extending outwardly from the button substrate toward the handle casing(#50, figure 3).

Regarding claim 16, Apprille'071 discloses that the edge of the canopy of the shaving razor disclosed above (in section 8) contacts the handle casing (#50 is in contact with #12, figures 16 & 17).

Regarding claim 17 Apprille'071 discloses that the edge of the canopy of the shaving razor disclosed above (in section 8) contacts the handle casing when the button is in an unloaded position (#50 is in contact with #12, figures 16 & 17).

Regarding claim 18 Apprille'071 discloses that the edge of the canopy of the shaving razor disclosed above (in section 8) having an angle of no greater than 110 degrees. This is because the angle formed between the button and the handle casing varies and is at a maximum in the front center region of the canopy, which at no time is greater than 110 degrees (#50 is in contact with #12, figures 16 & 17). See the figure above.

Regarding claim 22 Apprille'071 discloses that the edge of the canopy of a shaving razor as disclosed above (in section 8) contacts the handle casing when the button is in an actuated position (#50 is in contact with #12, figures 16 & 17).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 2, 3, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apprille Jr. et al (USPN 5,855,071) in view of Beresford-Jones (USPN 4,298,778).

Regarding claim 2, Apprille'071 teaches every aspect of the claimed invention as shown in section 5, paragraph 1. Apprille'071 does not teach a button which "is constructed to buckle during actuation". Beresford-Jones teaches a button, capable of

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being used in Apprille'071, which has a flexible canopy designed to buckle during actuation (see # 6 and 7 (only figure), which are the points at which the canopy buckles). It would have been obvious to one skilled in the art at the time the invention was made to apply the teachings of Beresford Jones to the teachings of Apprille'071. The motivation to combine is to provide a waterproof button (Beresford-Jones, column 1, lines 20-21).

Regarding claim 3, Apprille'071 teaches every aspect of the claimed invention as shown in section 5, paragraph 1. Apprille'071 does not teach a button which "is constructed to recover, after buckling, toward an original, unloaded position". Beresford-Jones teaches a button, capable of being used in Apprille'071, which has a flexible canopy designed to recover, after buckling, toward an original, unloaded position (see the dotted lines (only figure) showing the recovered position of the canopy). It would have been obvious to one skilled in the art at the time the invention was made to apply the teachings of Beresford Jones to the teachings of Apprille'071. The motivation to combine is to provide a waterproof button (Beresford-Jones, column 1, lines 20-21).

Regarding claim 14, Apprille'071 teaches every aspect of the claimed invention as shown in section 6, paragraph 1 above. Apprille'071 does not teach a button which "is constructed to buckle during actuation". Beresford-Jones teaches a button, capable of being used in Apprille'071, which has a flexible canopy designed to buckle during actuation (see # 6 and 7 (only figure), which are the points at which the canopy buckles). It would have been obvious to one skilled in the art at the time the invention was made to apply the teachings of Beresford Jones to the teachings of Apprille'071.

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The motivation to combine is to provide a waterproof button (Beresford-Jones, column 1, lines 20-21).

12. Regarding claim 15, Apprille'071 teaches every aspect of the claimed invention as shown in section 6, paragraph 1 above. Apprille'071 does not teach a button which "is constructed to recover, after buckling, toward an original, unloaded position".

Beresford-Jones teaches a button, capable of being used in Apprille'071, which has a flexible canopy designed to recover, after buckling, toward an original, unloaded position (see the dotted lines (only figure) showing the recovered position of the canopy). It would have been obvious to one skilled in the art at the time the invention was made to apply the teachings of Beresford Jones to the teachings of Apprille'071.

The motivation to combine is to provide a waterproof button (Beresford-Jones, column 1, lines 20-21).

13. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apprille Jr. (USPN 4,756,082) in view of Beresford-Jones (USPN 4,298,778).

Apprille'082 teaches a shaving razor with a cartridge (#10 figure 6) with a blade unit including a housing (defined by the perpendicular end pieces and long slender members joining them as seen in figure 6) that carries one or more shaving blades (column 3, lines 14-15) with a handle having a handle casing (#12, figure 1), an interconnect assembly (#16, #20, #62, #18 and #30, figure 3) disposed at an end of the handle casing (#12, figure 2), a release button comprising a button substrate (defined by the dashed lines in figure 1) and a flexible canopy extending outwardly from the button substrate toward the handle casing (#66, figures 1 and 3). Apprille'082 further

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teaches that the edge of the canopy contacts the handle casing (#66 is in contact with #12, figures 1 & 3) and that the edge of the canopy contacts the handle casing when the button is in an unloaded position (#66 is in contact with #12, figures 1 & 3) and that the edge of the canopy contacts the handle casing having an angle which varies around the periphery (as can be seen in the different depictions of #66 from above in figures 3 and 5 as compared with a side view in figure 1). This variation has a maximum as seen in figure 1, where the contact angle is about 110 degrees, and a minimum as seen in figures 3 and 5, where the contact angle is about 50 degrees.

Aprille'082 does not teach a button which is "constructed to buckle during actuation by the user". Beresford-Jones teaches a button, capable of being used in Aprille'082, which has a flexible canopy designed to buckle during actuation (see # 6 and 7 (only figure), which are the points at which the canopy buckles). It would have been obvious to one skilled in the art at the time the invention was made to apply the teachings of Beresford Jones to the teachings of Aprille'082. The motivation to combine is to provide a waterproof button (Beresford-Jones, column 1, lines 20-21).

Aprille'082 does not teach a button which "is constructed to recover, after buckling, toward an original, unloaded position". Beresford-Jones teaches a button, capable of being used in Aprille'071, which has a flexible canopy designed to recover, after buckling, toward an original, unloaded position (see the dotted lines (only figure) showing the recovered position of the canopy). It would have been obvious to one skilled in the art at the time the invention was made to apply the teachings of Beresford

Jones to the teachings of Apprille'082. The motivation to combine is to provide a waterproof button (Beresford-Jones, column 1, lines 20-21).

14. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apprille Jr. et al (USPN 5,855,071) in view of Jones et al (USPN 6,898,855).

Regarding claims 12 and 24, Apprille'071 discloses the claimed invention except for the material choice that the canopy be constructed of thermoplastic elastomer. Jones et al teaches the use of thermoplastic elastomer in buttons for gripping by the hand. (Col. 8 lines 1-5). It would have been obvious to one skilled in the art at the time of the invention to use thermoplastic elastomer, since it has been known to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious mechanical design expediency. *In re Leshin*, 125 USPQ 416. The motivation to combine is to provide a more ergonomic grip as disclosed in Jones et al. (col. 4 lines 5-15).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean M. Michalski whose telephone number is 571-272-6752. The examiner can normally be reached on M-F 8AM - 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smm

A handwritten signature in black ink, appearing to read 'DHB', with a long horizontal line extending to the right.

DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700